

WHAT IS CLAIMED IS:

1. A vortex generator for dispensing actives, comprising
 - a vortex chamber, -
 - a vortex element connected to said vortex chamber and having an orifice,
 - a bobbin housed within said vortex chamber for creating a pressure wave within said vortex chamber, said pressure wave traveling through said vortex element and exiting through said orifice as a vortex,
 - said bobbin comprising a cylinder and a diaphragm extending from said cylinder, and
 - a coil for causing axial movement of said cylinder.
2. The vortex generator of claim 1, further comprising a printed circuit board for controlling said coil.
3. The vortex generator of claim 1, further comprising an insert containing an active substance to be dispersed via said vortex generator.
4. A vortex generator comprising
 - a vortex cone having an outlet, said vortex cone being conical and defining a curved longitudinal axis,
 - an active substance housed within said vortex cone creating a concentration of said active substance, and
 - a waveform generator in said vortex generator for creating a waveform, said waveform entraining said concentration, and forming a vortex when exiting said vortex cone outlet.
5. The vortex generator of claim 4, further comprising
 - a hub, said hub having a recess
 - spokes extending from said hub, said spokes in fluid communication with said hub recess,

a bottle retained in said hub recess, said bottle containing said active substance.

6. The vortex generator of claim 4, further comprising a bracket extending from the inner surface of said vortex cone,

a bottle retained by said bracket, said bottle containing said active substance,

a wick extending into said active substance and out of said bottle.

7. The vortex generator of claim 4, further comprising a nozzle removably attached to said vortex cone outlet,

said active substance carried by said nozzle.

8. The vortex generator of claim 4, wherein said waveform generator comprises

a diaphragm,

an actuator for moving said diaphragm to create a waveform.

9. The vortex generator of claim 8, wherein said actuator comprises

a magnetic post attached to said diaphragm,

a wire wrapped about said magnetic post, said wire connected to a power supply.

10. The vortex generator of claim 8, further comprising a vortex chamber attached to said vortex cone, said diaphragm located between said vortex chamber and vortex cone.

11. A vortex generator for dispensing actives, comprising

a vortex chamber,

a vortex element connected to said vortex chamber and having an orifice,

a waveform generator in said vortex generator for creating a waveform and forming a vortex when exiting said vortex element orifice,

a base supporting said vortex chamber and vortex element, and

a mechanism causing oscillation of said vortex chamber and vortex element.

12. The vortex generator of claim 11, further comprising an active substance housed within said vortex element creating a concentration of said active substance.

13. The vortex generator of claim 11, wherein said vortex element is conical.

14. A vortex generator for dispensing actives, comprising

a vortex chamber,

a vortex element connected to said vortex chamber and having an orifice,

a waveform generator in said vortex generator for creating a waveform and forming a vortex when exiting said vortex element orifice, said waveform generator comprising a diaphragm and an actuator for causing movement of said diaphragm.

15. The vortex generator of claim 14, wherein said diaphragm actuator comprises a torsional spring and cam, said cam contacting said diaphragm.

16. The vortex generator of claim 14, wherein said diaphragm actuator comprises a motor driving a cam and a striker having a cam follower engaging said cam, said striker contacting said diaphragm.

17. The vortex generator of claim 14, wherein

said diaphragm actuator comprises a hub having at least one flapper extending radially outwardly from said hub, said flapper contacting said diaphragm.

18. The vortex generator of claim 14, wherein said diaphragm actuator comprises a foot pedal actuator having a striker, said striker moved toward the diaphragm by a motor and away from said diaphragm by a return spring.

19. The vortex generator of claim 14, wherein said diaphragm actuator comprises a solenoid and return spring causing oscillating movement of a linkage, said linkage causing a clapper to strike said diaphragm.

20. The vortex generator of claim 14, further comprising an active substance housed within said vortex element creating a concentration of said active substance.